10905

CORRES CONTROL
OUTGOING LTR NO

93RF7318

DIST	LTR	ENC
ENEDETTI, R.L.		
ENJAMIN, A.		
ERMAN, H.S.		
RANCH, D.B.		
ARNIVAL, G.J		
OPP, R.D.		
AVIS, J.G.		
ERRERA, D W		
IANNI, B.J.		
IARMAN, L.K.		
EALY, T.J.		
EDAHL, T.		
ILBIG, J.G.		
IRBY, W.A.		
UESTER, A.W		
LEE, E.M.		
MANN, H.P	X	
MARX, G.E		
McDONALD, M.M.		
McKENNA, F.G.		
MONTROSE, J.K.		
MORGAN, R V		
POTTER, G.L.		
PIZZUTO, V.M.		
RILEY, J H.		
SANDLIN, N.B.		
SHEPLER, R. L.		
STEWART, D.L.		
SULLIVAN, M.T		
SWANSON, E R.		
WILKINSON, R.B	X	
WILLIAMS, S (ORC)		
WILSON, J.M.		
ZANE, J O		
BUSBY, W.S	X	X
LAKE, D Y O	✓	
Gee, C B	✓	
O'Neill, K	✓	
CORRES CONTROL	X	X
ADMIN RECORD	X	X
TRAFFIC		

CLASSIFICATION

UCNI		
UNCLASSIFIED	X	X
CONFIDENTIAL		
SECRET		

AUTHORIZED CLASSIFIER SIGNATURE

DOCUMENT CLASSIFICATION REVIEW WAIVER PER

DATE CLASSIFICATION OFFICE

IN REPLY TO RFP CC NO

ACTION ITEM STATUS

☐ OPEN ☑ CLOSED

☑ PARTIAL

LTR APPROVALS
WSB

ORIG & TYPIST INITIALS
KKO KEO dql

EG&G ROCKY FLATS

EG&G ROCKY FLATS INC
ROCKY FLATS PLANT P O BOX 464 GOLDEN COLORADO 80402-0464 (303) 966 7000

June 15 1993

93 RF 7318

R J Schassburger
Acting Director
Environmental Restoration Division
DOE, RFO

Attn P Singh

ROCKY FLATS ENVIRONMENTAL DATABASE SYSTEM (RFEDS) DATA CLEANUP FOR OPERABLE UNIT NO 1 (OU 1) WSB 285 93

In response to your verbal requests of May 21 and June 11 and your written request in DOE letter 06508 attached is an issue paper on the RFEDS data for OU 1 This issue paper details the efforts undertaken to take RFEDS data and develop from it a data set that is acceptable and useable for the OU 1 RI report Your letter also requests an action plan to resolve the problems and an explanation of how EG&G plans to manage the clean data set For these issues I must refer you to the individuals managing RFEDS The OU managers are merely a customer of that group and while we do provide suggestions to improve the system any changes must come from that group

If you have questions please call Cindy Gee at 966 8550

W S Busby
Acting Director
ERM/Remediation Project Management

KKO:dql

Orig and 1 cc R J Schassburger

Attachment
As Stated

ADMIN RECORD

ISSUE PAPER

In order to provide responses to agency comments to the Operable Unit 1 (OU 1) 881 Hillside Phase III RFI/RI analytical data was required by the subcontractor performing these duties The data was provided by the Rocky Flats Environmental Database System (RFEDS) to the subcontractor via an Electronic Data Deliverable (EDD) The subcontractor was unable to use the data as delivered resulting in several delays This memo will provide details of the cause of these delays

The sampling locations (stations) provided as OU 1-specific stations were not always applicable to OU 1 and some of the stations needed for OU 1 were not included in the EDD Subsequently the subcontractor listed the stations that were needed and provided that to RFEDS to complete the data set This process took some time due to uncertainty as to which wells were appropriate for OU 1 and determinations of which stations were considered appropriate for use in the study Apparently the data set denoted in the RFEDS data base is not the same as that which the OU 1 Work Plan delineated

There were problems associated with duplicate results for a parameter/sample RFEDS does not earmark any sample as a duplicate In order to delete duplicates the subcontractor had to review field sheets To analyze the data from each medium (soil and water) the subcontractor needs only sample data Therefore a program was written by the subcontractor to eliminate all field and lab quality control samples Some stations were listed twice with all analytical data the same so one each of those had to be removed manually from the data set Another duplication issue is that RFEDS inputs data from the laboratory and once the validation process is complete the validation data is input The result is that the same data shows up in two records as validated and un validated the un validated data was removed by the subcontractor manually

There were two matters of inconsistency which required individual examination for each record displaying one of these characteristics The first was that there was a result field for entry of results when they have been changed during the validation process but for some radiochemistry values there was no revised uncertainty value The solution to this was that for any new radiochemistry value which varied less than 10% the original uncertainty value could be used but for those greater than 10%

individual review by RFEDS personnel was required The other matter was that several lab reruns lab replicates and lab dilutions were incorrectly marked by the labs as real or target samples The solution to this was individual review by RFEDS personnel for radiochemical data For non radiological data where the values and the validation statuses were different individual review was performed by the validation subcontractor (Quantilux) For non radiochemical data where the values differed but the validation status was the same the data had to be averaged The subcontractor is writing the program to do that average For non radiochemical data where the values were the same either could be used

General inconsistency removal from the data base was also time consuming For example for situations in which it was necessary to sort by date the subcontractor had to write a program to create a standard date format As an example in order to write the RI report the seasonal fluctuations in ground water are crucial The data from RFEDS consists of some dates appearing in a MM/DD/YY format and some noted as DD MM YY Another example is inconsistent units Surface water units showed up as mg/kg and mg/l For some cases this was an error but for other cases the mg/kg was a filter sample Which case was not indicated by the RFEDS data so each had to be researched individually For the filter samples the subcontractor had to research why there was sediment data from a water sampling location Furthermore some of the analytical test codes and quality control codes in the EDD were not on the code list provided by RFEDS

Several miscellaneous processes were required to be performed by the subcontractor It was necessary to remove inorganic values with % as the unit and any tentatively identified compound values from the data set Analyte groups had to be separated For example the radiochemistry and metals EDD contained both filtered and unfiltered samples the volatile organic analyte (VOA) EDD contained both VOAs and semi VOAs and the water quality EDD contained pesticide/PCBs herbicides semi volatiles water quality parameters and sediment data (filter issue mentioned above)

Another difficulty was that for ground water monitoring wells if there was no data RFEDS does not indicate whether the reason for the lack of data was that the well was dry not sampled or insufficient for a full suite As a result the subcontractor had to reconstruct the sampling

history in order to accurately represent hydrology This proved to be a very time consuming effort

Finally due to the time taken to resolve the above issues a new EDD was necessary There was a new list of stations and improvements had taken place within the RFEDS data base The process of filtering and separating data and replacing all results with previously corrected results had to be performed again

All of these efforts caused delays in the preparation of a working data set for the OU 1 RFI/RI and Risk Assessment The subcontractor and EG&G RFEDS personnel worked very hard to resolve the issues as quickly as possible However although the task was budgeted for 272 hours in the OU 1 contractor s budget the total time to completion was actually 426 hours constituting a 4 week delay